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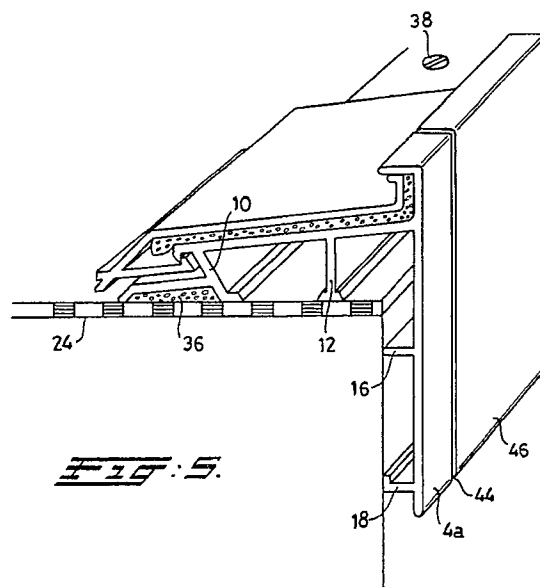
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(54) **Eaves section assembly.**

(57) Eaves section assembly with a body part (8) resting on the roof surface (22) and at its front end a space (30) determined by the body part (8) and an L-shaped upstanding rib (28) for accomodating with play the one end (50) of a covering section (6) of which the other end (54) is hooked behind a locking rib (42) at the body section, compressible material (64) being provided between the covering section (6) and the body part (8).



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The invention relates to an eaves section assembly such as is described in the preamble to the main claim.

Such an eaves section assembly is known per se from NL-A-8702662. In the case of this known eaves section assembly the expansion joint present between the two bottom sections is covered by a covering sheet made of a thin sheet material which is clamped by the flanged end edge around the adjacent end edges of the bottom sections and is forced with its other end, flanged to a U-shape, into the nesting space determined by the L-shaped rib.

A condition for such a method of sealing is that the two bottom sections between which the space must be sealed lie exactly in line, which hardly ever occurs in practice. Even then, rainwater can gain access through capillary action between the covering section and the bottom section, one result of which is wet patches on the outside wall. Besides, the covering sheet is found in practice to be difficult to fit, and during fitting is found to damage the top surface of the bottom section, which is generally finished with a surface coating. After fitting, removal - for example for inspection purposes - is not possible without damaging the bottom sections.

The object of the invention is to eliminate these disadvantages, and this is achieved according to the invention with the measures described in the characterizing part of the main claim.

For fitting of the covering section designed according to the invention, all that is needed is to compress the resilient, compressible material on the bottom side thereof onto the body part of the bottom section and slide the cross rib of the covering section into the nesting space until the two locking ribs have passed each other; when the covering section is then released, it springs by itself into the desired end position without damage to the bottom section having occurred, and this locked end position is achieved even if the bottom sections are not exactly in line with one another.

Removal of the covering section is possible at any time by carrying out the operations for fitting thereof in the reverse order.

The resilient compressible material not only ensures locking and the taking up of tolerances, but also prevents damage during fitting and on expansion of the bottom section, and provides a seal against the penetration of rainwater.

Preferred embodiments of the eaves section assembly are described in the sub-claims.

It is observed that DE-A-3520640 discloses an eaves section assembly with a number of adjacent lower section parts, each with a protective front strip, and an L-shaped rib and, superimposed thereon a number of upper section parts of which the front edges hook behind the L-shaped ribs, and

fastened to the roof by means of screws. There are no provisions to prevent water penetrating through the expansion joints between the adjacent sections and the upper section parts cannot be easily removed and refitted for inspection purposes.

The invention is explained with reference to the drawing, in which:

Figure 1 is a cross-section through a part of eaves with the bottom section part according to the invention;

Figure 2 is a cross-section through the covering section with resilient material to be placed thereon;

Figure 3 is a cross-section of these parts during placing of the covering section on the bottom section;

Figure 4 is a cross-section of the complete eaves section assembly;

Figure 5 is a perspective drawing, partially in cross-section, of this complete section assembly.

The section assembly according to the invention, indicated in the figures in its entirety by the reference number 2, comprises a bottom section 4 and a covering section 6 to be placed thereon.

The bottom section 4 comprises a body part 8 with two supporting ribs 10, 12 going out from the bottom side thereof, which body part 8 bears at the front side a protective strip 14 which is provided with supporting ribs 16, 18 by means of which the protective strip 14 rests against the raised edge 20 of the roof 22 with the roof covering 24 fitted thereon. The protective strip 14 extends past the body part 8 into a part 14a which merges into an end edge 26, so that in fact an L-shaped rib 28 goes out from the body part 8. This produces a nesting space 30 with height  $h_1$  above the body part 8.

An auxiliary rib 32 with end edge 34 goes out from the supporting rib 10, which edge - like the end edges of the ribs 10 and 12 - rests on the roof covering 24 when the section 4 is fitted.

Under the auxiliary rib 32 is compressible material 36 which is compressed on fitting of the section after tightening of the fixing screws 38 thereof (see Figure 5).

The body part 8 projects over a short distance past the rib 10 and ends in a downward directed locking rib 40 with hooked end 42. The purpose of this will be explained later.

On fitting of the bottom sections on the eaves (see Figure 5) an expansion joint 44 must remain free between two adjacent sections 4a, 4b. In order to prevent water penetration, this joint must be covered, and the covering section 6, of which Figure 2 shows a cross-section, serves this purpose. This covering section 6 comprises a sheet-shaped part 46 having at the first end 48 a cross rib 50 and

at the second end 52 a flanged end edge 54 which is formed by an edge 46a forming an obtuse angle with the sheet part 46 and a rib 60 with a hooked end 62 going out near the end thereof.

Resilient, compressible material 64 is provided on the bottom face of the sheet part 46, preferably in the form of elongated strips. The thickness of this material is such that the distance h2 between the bottom side of this material and the top end of the rib 50 is greater than the height h1 inside the nesting space 30.

Figures 3 and 4 show how the covering section 6 is fitted on the bottom section 4: the rib 50 of the covering section 6 is taken into the nesting space 30 while the resilient elastic material 64 is being compressed, and the bottom side of the rib 60 is pressed against the top surface of the auxiliary rib 32. In this case the points of the hooks 62 and 42 are clear of each other, as shown in Figure 3. The covering rib 6 is then pressed into the position shown in Figure 4, and the rib 6 is then released: through the resilience of the resilient material 64, the covering section 6 comes up and is securely anchored to the bottom section 4.

Removal of the covering section is possible at any time by carrying out the operations described above in the reverse order.

It is clear that there are no limits for the length of the covering section 6, so that the section assembly can also be made in the form of a so-called "double trim", where the bottom sections are thus covered over their entire length with a covering section.

## Claims

1. Eaves section assembly (2) having section parts to be fitted in line with each other near the eaves, each with a body part (8) supported by means of ribs (10, 12) on the roof surface (22) and a protective strip (14) provided at right angles to the front end edge, and having near said first end edge, going out from the top face of the body part, an L-shaped rib (28) facing away from the roof surface, while above two adjacent section (6) parts a covering section covering the space between them is fitted, with at the first end thereof a first cross rib (50) fitting inside the space (30) determined by the body part (8) and the L-shaped rib (28) and at the second end (54) an end edge (54) flanged in the opposite direction to said cross rib (50), **characterized in that** the first cross rib (50) fits with ample play inside the space (30) determined by the body part and the L-shaped rib, that near the second end edge (40) of the body part (8), on the bottom surface thereof a locking rib (42), facing the roof surface and

running in the lengthwise direction of the section is provided which rib (42) is intended for interacting with a second locking rib (62) projecting upwards from the flanged end edge (54) of the covering section (6), and that the surface of the covering section (6) facing the body part (8) is provided with resilient, compressible material (64).

2. Eaves section assembly according to claim 1, **characterized in that** from a supporting rib (10) going out near the second end (40) of the body part (8) thereof an auxiliary rib (32) facing away from the body part (8) and extending past said end edge (40) extends which during placing of the covering section (6) acts as a supporting face for the flanged part (54), of the end edge thereof.

3. Eaves section assembly according to claim 1 - 2, **characterized in that** the compressible material (64) on the covering section is fitted in the form of elongated strips.

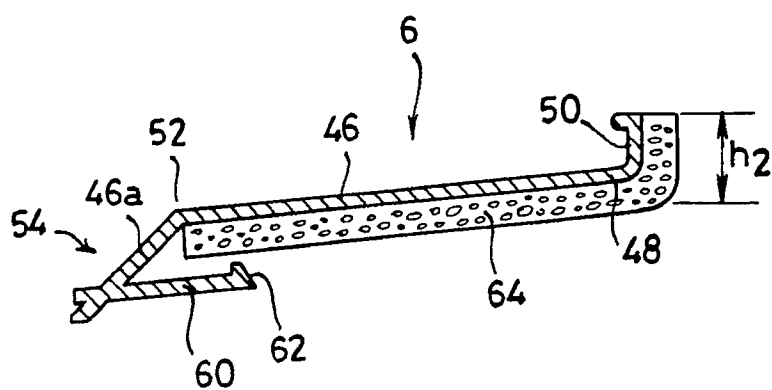
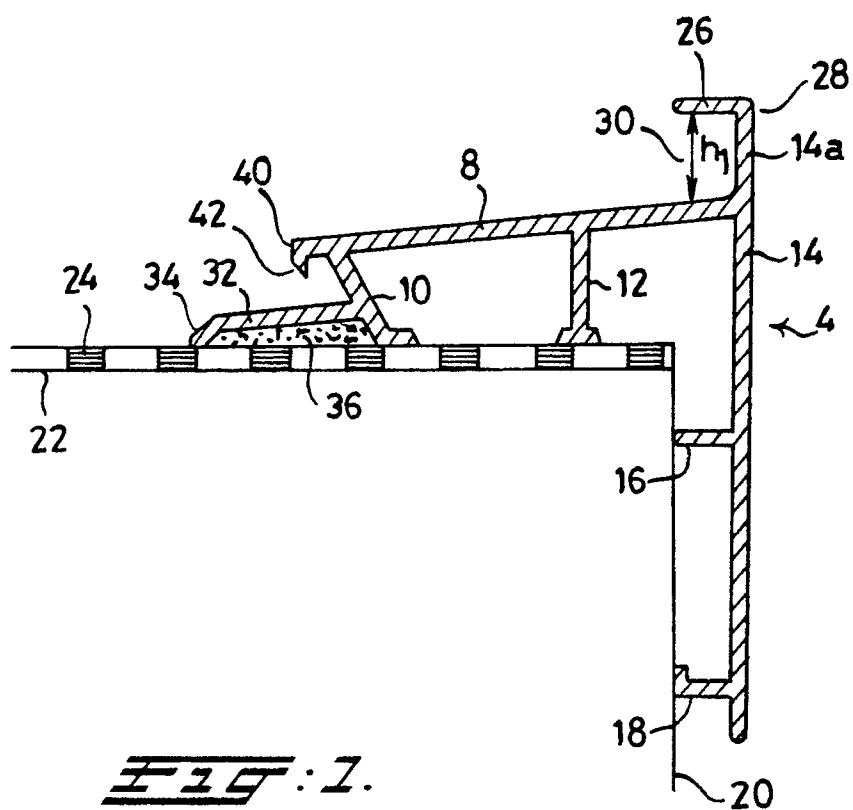
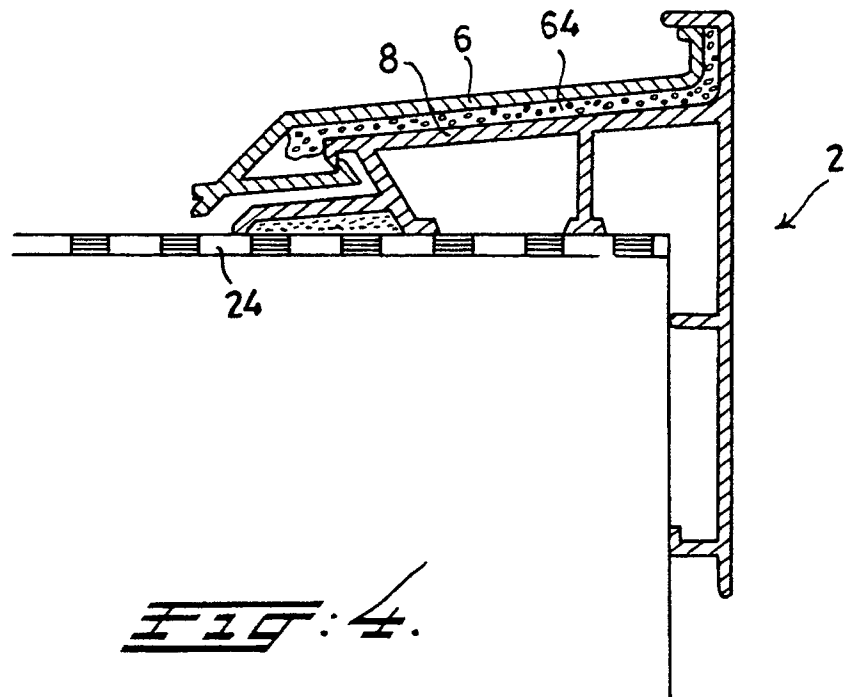
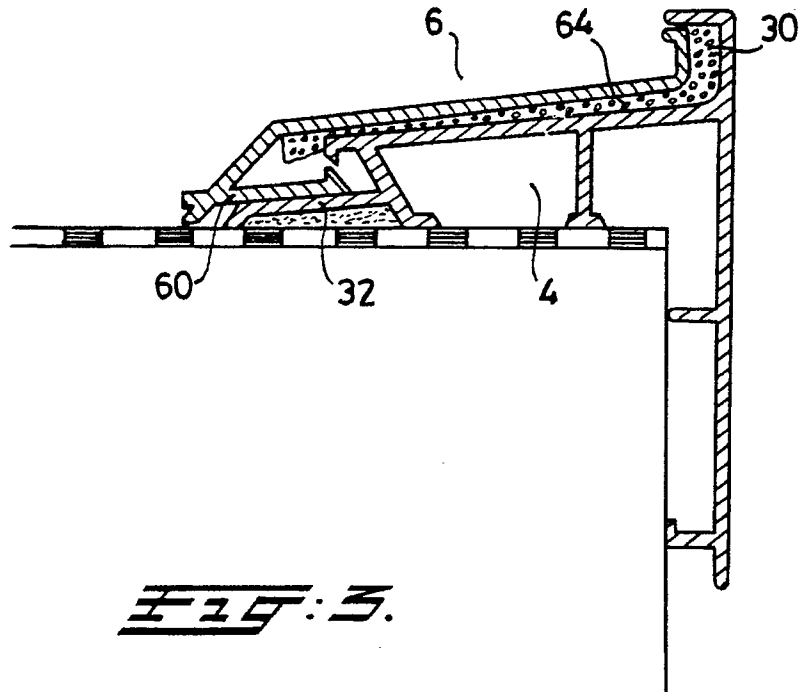
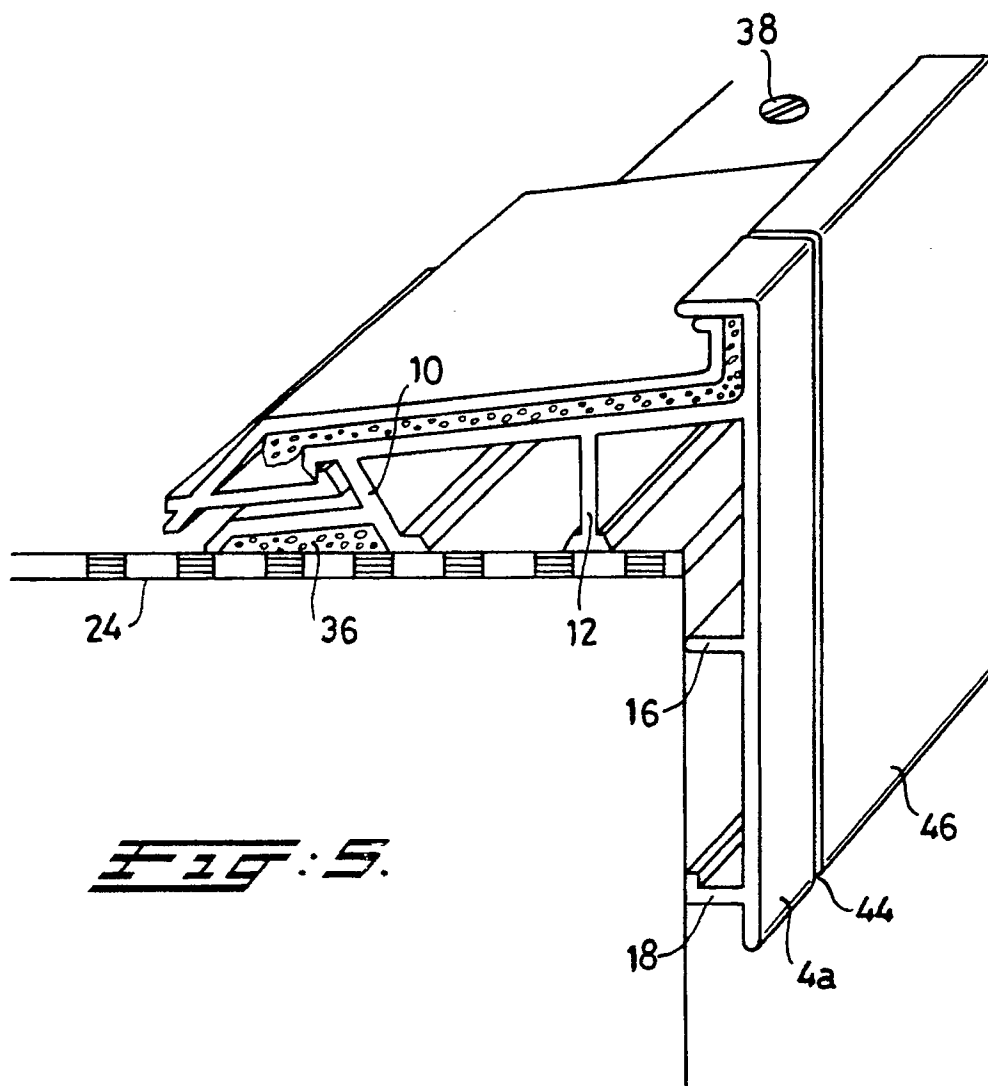


Fig: 2.







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## EUROPEAN SEARCH REPORT

Application Number

EP 91 20 0432

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
Y,D	NL-A-8 702 662 (COMPRI ALUMINIUM) * claim 1; figures 1-2 * - - -	1	E 04 D 13/15
Y,D	DE-A-3 520 640 (HILLE) * page 7, paragraph 3 - page 8, paragraph 2 ** page 12, paragraph 2; figure 1 * - - -	1	
A	DE-A-2 913 618 (AVG ALUMINIUM VERTRIEBS) * page 5, paragraph 3 - page 6, paragraph 2; figures 1,2 * - - -	1,2	
A	NL-A-8 301 857 (IKKING) * page 2, line 9 - page 2, line 10; figures 1,2 * - - - - -	3	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			E 04 D
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of search 18 June 91	Examiner HENDRICKX X.
<div>CATEGORY OF CITED DOCUMENTS</div> <div>X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document T: theory or principle underlying the invention</div> <div>E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons ----- &amp;: member of the same patent family, corresponding document</div>			